

**ABSTRACT**

The present invention is related to an adaptive equalizer comprising: an equalizer filter (32) for filtering a distorted signal from a communication channel, having a data input (30) for receiving said distorted signal, a feedback signal input for a feedback control signal, and which generates an output signal at an output node (35); circuitry (46) for processing said output signal and generating said feedback control signal, the circuitry comprising a first means (38) for measuring a short-term-amplitude signal of said output signal, a second means (38) for measuring a long-term-amplitude signal of said output signal, a comparator means (43) that compares said short-term-amplitude signal and said long-term-amplitude signal and that determines the evolution of said feedback control signal, arranged such that said distorted signal is compensated for its higher frequency attenuation in said communication channel.